

ABSTRACT

An encryption key transfer system is provided. The system may be operative to generate encrypted files on a portable storage medium which may be used to transfer encrypted keys between ATMs using a single operator. Such secret encrypted keys may include a terminal
5 master key. The system may include a source ATM and a target ATM with a common software program and/or hardware installed in each ATM. The source ATM may use secret information associated with the common software program and/or hardware and other randomly generated information to securely encrypt the secret encryption keys. The source ATM may further store the encrypted secret encryption keys and the randomly generated information on a portable
10 storage medium. The target ATM may be operative to decrypt the secret encrypted keys using the secret information associated with the common software program and/or hardware and the randomly generated information retrieved from the portable storage medium.